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| APPLICATION NO.                             | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 09/537,546                                  | 03/30/2000  | Knut Beneke          | 31659-157399        | 7765             |
| 26694                                       | 7590        | 03/07/2005           | EXAMINER            |                  |
| VENABLE, BAETJER, HOWARD AND CIVILETTI, LLP |             |                      | LE, BRIAN Q         |                  |
| P.O. BOX 34385                              |             |                      | ART UNIT            |                  |
| WASHINGTON, DC 20043-9998                   |             |                      | PAPER NUMBER        |                  |

2623

DATE MAILED: 03/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/537,546

Applicant(s)

BENEKE, KNUT

Examiner

Brian Q Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 December 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/01/2004 has been entered.

**Response to Amendment and Arguments**

2. Applicant's arguments, see "Remarks", filed 10/01/2004, with respect to the rejection(s) of claim(s) 1-10 under 35 U.S.C 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Hiraoglu U.S. Patent No. 6,272,230.

***Drawings***

3. Figure 2 is objected to as depicting a block diagram without "readily identifiable" descriptors of each block, as required by 37 CFR 1.84(n). Rule 1.84(n) requires "labeled representations" of graphical symbols, such as blocks; and any that are "not universally recognized may be use, subject to approval by the Office, if they are not likely to be confused with existing conventional symbols, and if they are readily identifiable." In the case of Figure 2, the blocks are not readily identifiable per se. Each block should have a corresponding label that identifies its function or purpose. A proposed drawing correction or corrected drawings are required in reply to the Office Action to avoid abandonment of the application. The objection to the drawings will not be help in abeyance. **Please label the arrow of FIG. 2.**

***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Regarding claim 1, the original disclosure does not show the support for the newly added limitation “wherein said coordinate ... **distance exceeds a previously set, variable limit**” (Page 8 for the original disclosure shows the distance **must not exceed** a previously set) (emphasis added). In addition, the original disclosure does not explain of how the concept of variable limit value is computed/calculated. Appropriate correction is required. Claims not specifically addressed depend from indefinite antecedent claims.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 1-3 and 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Hiraoglu U.S. Patent No. 6,272,230 and Krug U.S. Patent No. 5,838,758, and further in view of Simanovsky U.S. Patent No. 6,317,509.

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Referring to claim 1, Hiraoglu teaches a method of processing an X-ray image of articles (tomography) (Abstract) contained in a transilluminated object and made visible (baggage scanning system inherently transilluminate objects and make them visible) (column 6, lines 25-32) for an observer on a monitor screen (computer) (FIG. 4, "EDA Computer"), comprising the following steps:

(a) placing individual markings about the image or certain, previously determined articles (pixels are being marked from the computation of region of interest and boundary box) (FIG. 6, element 314; FIG. 8A-8B; FIG. 11; column 19, lines 15-20; column 20, lines 40-41; column 22, lines 60-64);

(b) automatically (a computer software processing will process automatically) and stepwise combining the individual markings into a final added marking if at least two individual markings mutually fit (FIG. 9, steps 342-346; column 29, lines 1-35; column 31, lines 52-57); said combining step comprises the steps of

(1) Performing a coordinate (i, j, k coordinates are used in the comparing of voxel and markings) (FIG. 10; column 15, lines 55-67 and column 16, lines 1-6) comparison to identify mutually facing sides of two adjoining individual markings (to check if the objects satisfy the criterion before merging) (column 31, lines 52-67 and column 32, lines 1-25); and

Hiraoglu does not clearly teaches the concept of determining a ratio of an overlapping area of said two adjoining individual markings to the total area of at least one of said two adjoining individual markings. Hiraoglu also does not explicitly teach the coordinate comparison comprises determining a distance between a coordinate of the first adjoining marking and a coordinate of the second adjoining marking, and determining whether the distance exceeds a

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previously set, variable limit. Krug teaches a method of processing X-ray image of articles (Abstract) that determining a ratio of overlapping area of adjoining individual markings (FIG. 19, elements 2060 and 2070 and column 4, lines 15-31). In addition, Simanovsky teaches a method detects sheet explosives in computed tomography comprises coordinate comparison which determining a distance between a coordinate of the first adjoining marking and a coordinate of the second adjoining marking (distance calculation for each plane), and determining whether the distance exceeds a previously set, variable limit (different thresholds) (column 21, lines 53-67).

Modifying Hiraoglu's method of method of processing an X-ray image of articles according to Krug will provide the ability to assign the selected areas with the appropriate probability for the presence of different object in the vicinity and/or neighborhood (column 6, lines 17-25). In addition, modifying Hiraoglu's method of method of processing an X-ray image of articles according to Simanovsky will provide the ability to calculate the overlapping regions in further determining explosive sheet. This would improve processing e.g. allow enhanced detection of objects more accurately and therefore, it would have been obvious to one of the ordinary skill in the art to modify Hiraoglu according to Krug and Simanovsky.

Referring to claim 2, Krug teaches the method wherein said comparing step comprises the step of comparing lengths and positions of said facing sides (column 6, lines 14-18).

For claim 3, Krug further teaches the method wherein said step of determining a ratio comprises the step of determining a ratio of said overlapping area of said two adjoining individual markings with the total area of one of said two adjoining individual markings (FIG. 4, column 5, lines 20-32; column 3, lines 1-22; and column 4, lines 15-32).

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Referring to claim 7, Hiraoglu teaches the method wherein said comparing and determining steps include the steps of comparing coordinates in which said individual and individual added markings are positioned (column 20, lines 10-23 and column 25, lines 60-67).

Regarding claim 8, Hiraoglu teaches the method wherein the individual markings are respective rectangles surrounding the image of a respective article (FIG. 8A-8B).

For claim 9, Hiraoglu further teaches a monitor screen (column 15, lines 1-5) display individual markings (FIG. 8A, FIG. 8B and column 21).

For claim 10, Krug teaches the method wherein the transilluminated objects are transilluminated baggage objects (different energies show on the X-ray to different material such as baggage objects due to the material difference in photoelectric effect scattering characteristics) (abstract).

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***Allowable Subject Matter***

8. Claims 4-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

***Contact Information***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian Q Le whose telephone number is 703-305-5083. The examiner can normally be reached on 8:30 A.M - 5:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amelia Au can be reached on 703-308-6604. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-5397 for regular communications and 703-308-5397 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

BL  
March 2, 2005



SAMIR AHMED  
PRIMARY EXAMINER